

## REMARKS

Claims 1-33 are pending. An Office Action mailed July 25, 2002 rejected Claims 1, 2, 4-6, 10-14, 16-25, 27-29, and 33 under 35 U.S.C. §102 and rejected Claims 3, 7-9, 15, 16, and 30-32 under 35 U.S.C. §103. By way of this Amendment, Applicants have cancelled Claims 5, 10, 12, 17, 21, 23, 28, and 33 and amended Claims 1, 4, 6-9, 11, 13, 18, 24, 27, and 29-32. Pursuant to 37 CFR §1.111, Applicants hereby respectfully request consideration of the application.

### REJECTION OF CLAIMS UNDER 35 U.S.C. §102

The Office Action rejected Claims 1, 11, 13, and 24 as being anticipated by Jacobs et al. The Office Action states that Jacobs et al. teaches receiving user voice input, performing front-end voice processing, sending the front-end processed voice over a network and completing voice processing at a server. Claims 1, 11, and 13 are also rejected as being anticipated by Moore et al. for disclosing the same things that Jacobs et al. discloses as described above. With regards to amended independent Claims 1, 11, 13, and 24, Applicants respectfully traverse these rejections.

Applicants submit that Jacobs et al. and Moore et al. disclose performing some speech recognition techniques at the user device. Jacobs et al. disclose a feature extraction element 22 that extracts relevant characteristics of the input speech (col. 5, lines 29-32). Moore et al. disclose first and second processing steps wherein the first processing step is in the handset and may be a first step in a speech recognition process and the second processing step comprises the remaining steps of the speech recognition process that is performed at a remote central server (col. 2, lines 28-39). Applicants submit that the processing performed by the present invention cleans up the speech before delivery by performing two or more of noise cancellation, echo-cancellation, or end pointing. The processing techniques are not speech recognition processing steps. But, the steps performed at the user device of the present invention of cleaning up the recording allows the recognition process to be more accurate at the server. There is an important distinction between the present invention and the prior art in that because the present invention




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does not perform speech recognition processing at the user device, the server can easily convert the received processed user voice input back into speech. Therefore, Applicants submit that Jacobs et al. and Moore et al. fail to teach or suggest processing received user voice input at the user system based on two or more of noise cancellation, echo-cancellation and end-pointing. Therefore, Applicants submit that amended independent Claims 1, 11, 13, and 24 are allowable over Jacobs et al. and over Moore et al. Because Claims 2, 4-6, 14, 16, 18-20, 22, 25, 27, and 29 all depend from allowable independent Claims 1, 11, 13, and 24 and are allowable for the same reasons that make their corresponding independent claims allowable.

REJECTION OF CLAIMS UNDER 35 U.S.C. §103

The Office Action rejected Claims 3, 15, and 26 as being unpatentable over Moore et al. in view of Reed et al. The Office Action also rejected Claims 7-9 and 30-32 as being unpatentable over Jacobs et al. in view of Kennedy, III et al.

Applicants submit that Reed et al. and Kennedy, III et al. fail to overcome the deficiencies of Moore et al. and Jacobs et al. as indicated above. Therefore, since Claims 3, 15, and 26 depend from allowable amended independent Claims 1, 13, and 24, they are allowable for the same reasons that make their corresponding independent claims allowable.

CONCLUSION

For the reasons set forth above, the Examiner's references, while close in general nature, are not descriptive of the claimed invention. The amendments place this application in a condition for allowance.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Amended) A voice communication method comprising:
  - receiving user voice input at a user system;
  - [performing front-end voice] processing [of] the received user voice input at the user system based on two or more of noise cancellation, echo-cancellation or end-pointing;
  - sending the [front-end] processed user voice input to a server over a network; and
  - [completing voice] performing speech recognition processing of the sent [front-end] processed user voice input at the server.
4. (Amended) The method of claim 1, wherein [performing front-end voice] processing of the received user voice input is further based on [comprises] sampling the received user voice input.
6. (Amended) The method of claim 1, further comprising performing a function at the server based on the [completed voice] performed speech recognition processing.
7. (Amended) The method of claim 1, further comprising receiving user system status information, and wherein sending the [front-end] processed user voice input to a server over a network sends the user system status information with the [front-end] processed user voice input based on transmission requirements.
8. (Amended) The method of claim 7, wherein sending the [front-end] processed user voice input to a server over a network includes sending the user system status information and the [front-end] processed user voice input in interspersed distinct transmission packets.



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9. (Amended) The method of claim 7, wherein sending the [front-end] processed user voice input to a server over a network sends only the user system status information when no user voice is received.

11. A voice communication method comprising:

receiving user voice input at a user system;

[performing front-end voice] processing [of] the received user voice input at the user system based on two or more of noise cancellation, echo-cancellation or end-pointing [wherein the front-end voice processing includes sampling the received use voice input];

sending the [front-end] processed user voice input to a server over a network;

[completing voice] performing speech recognition processing of ~~the~~ sent front-end processed user voice input at the server; and

performing a function at the server based on the [completed voice] performed speech recognition processing.

13. (Amended) A voice communication system comprising:

a user system comprising:

a microphone configured to receive user voice input;

a processor configured to [perform front-end voice] process[ing of] the received user voice input based on two or more of noise cancellation, echo-cancellation or end-pointing; and

a communication component configured to send the [front-end] processed user voice input to a destination over a network; and

a server system coupled to the network, the server comprising:

a communication component configured to receive the sent [front-end] processed user voice input; and



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a processor configured to [complete voice] perform speech recognition  
processing of the sent processed user voice input.

18. (Amended) The system of claim 13, wherein the processor of the server comprises a component configured to perform a function based on the [completed voice] performed speech recognition processing.

24. (Amended) A voice communication system comprising:

a means for receiving user voice input at a user system;

a means for [performing front-end voice] processing [of] the received user voice input  
at the user system based on two or more of noise cancellation, echo-cancellation  
or end-pointing;

a means for sending the [front-end] processed user voice input to a server over a  
network; and

a means for [completing voice] performing speech recognition processing of the sent  
[front-end] processed user voice input at the server.

27. (Amended) The system of Claim 24, wherein the means for [performing front-end voice] processing [of] the received user voice input comprises a means for sampling the received user voice input.

29. (Amended) The system of Claim 24, further comprising a means for performing a function at the server based on the [completed voice] performed speech recognition processing.

30. (Amended) The system of Claim 24, further comprising a means for receiving user system status information, and wherein the means for sending the [front-end] processed user voice input to a server over a network sends the user system status information with the [front-end] processed user voice input based on transmission requirements.

31. (Amended) The system of claim 30, wherein the user system status information and the [front-end] processed user voice input are sent in interspersed distinct transmission packets.



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32. (Amended) The system of claim 30, wherein the means for sending the [front-end] processed user voice input to a server over a network sends only the user system status information when no user voice is input at the means for receiving.




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